



Macdonald Farm Journal

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F A R M . S C H O O L . H O M E



Corner of Main and RR1

Moved by the same desire which prompted his forefathers to push back the frontier and tame the wilderness, today's farmer still retains a determination to be independent—to till his own acres—to impart to his sons and daughters a love for the land and to conduct a successful business—a business in which every Canadian has an interest.

Times have changed "down on the farm" however, and, although the farmer may have moments of nostalgia for "the good old days", he certainly wouldn't exchange today's farming methods for yesterday's backbreaking toil—when his job was truly a dawn-to-dusk struggle.

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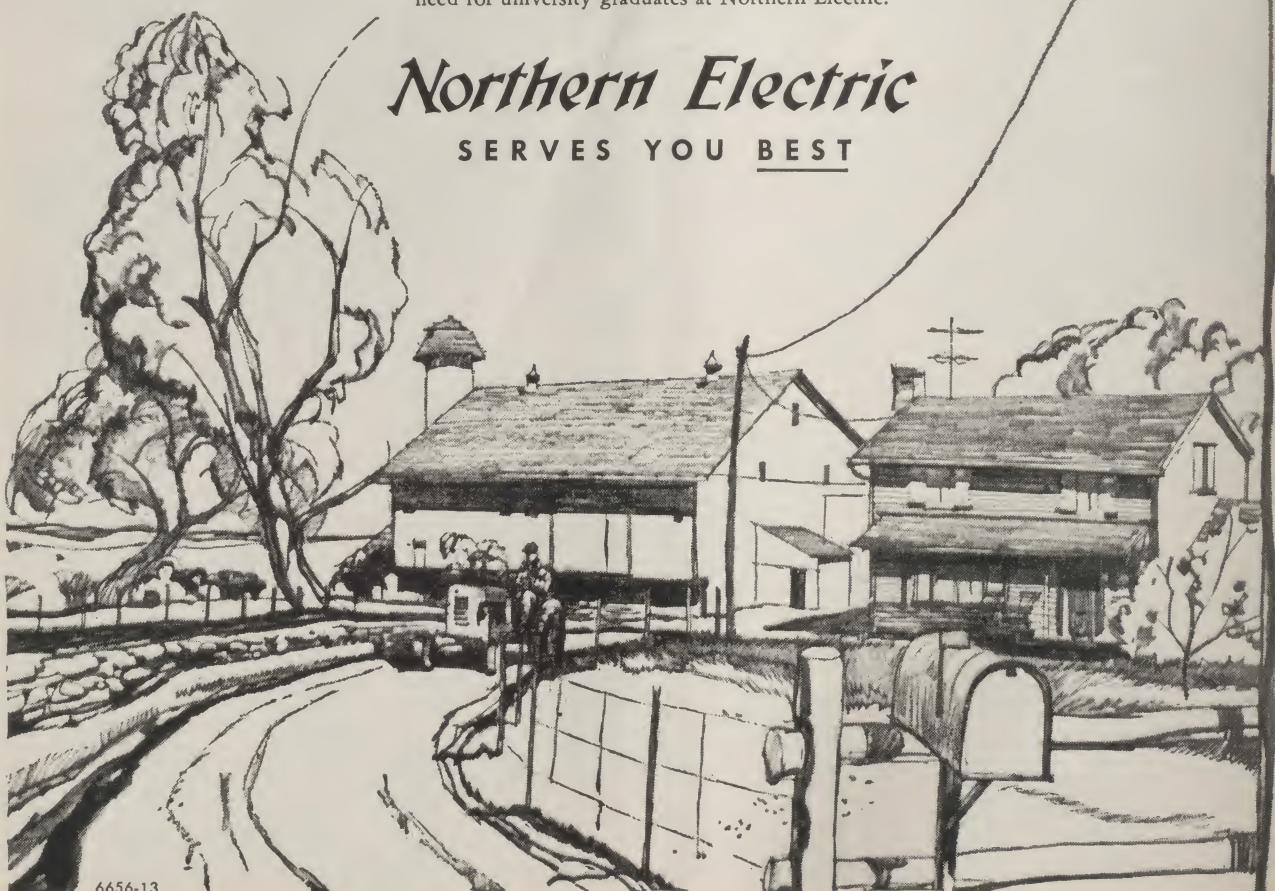
This same power has enabled the farm families to enjoy all the comforts and conveniences of urban dwellers—and in so doing has created large new markets for electrical products.

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As we see it

Land Policy For Eastern Canada

The Prime Minister recently stated, "I am convinced that some of the land in Eastern Canada, that hard working Canadians are trying to use as farms, should go back to forest and water conservation uses, and those attempting to live on them should be resettled in more rewarding surroundings."

This forthright and challenging statement was followed with a proposal that the issues involved in the use of the land in Eastern Canada should be thoroughly studied. This is needed in order to inform the Canadian people about what kind of land policy is needed. It is only on the basis of wide public sympathy that the measures necessary to bring about the desired changes can be made.

Factual support for the Prime Minister's statement is provided in the fact that during the 1940's the volume of farm output in Eastern Canada increased by 15 to 20 per cent; and this was achieved with a 5 to 6 per cent reduction in the acreage of improved farm land. Individual farmers are gradually making the desirable adjustments referred to by the Prime Minister. But this does not remove the need either for careful study of the problem or for policy based on such a study.

General aims of land policy for Eastern Canada should be to help individual farmers make desirable adjustments in the use of their land, and to determine the areas which are not suitable to farming — areas which might be more suited, in the words of the Prime Minister, "for forest and water conservation uses."

Facing the latter issue might entail public acquisition of agricultural land on which farmers cannot make a living. In any event, it would require a land classification. It is to be hoped that this would be conceived and oriented to the particular need at hand. While promoting forestry and water conservation are important considerations, they do not rank with assisting farmers to move from infertile and unproductive land. Such an approach may be required if we are to face up to a serious aspect of the problem of low incomes in agriculture.

The Prime Minister's statement also suggests that the most efficient means of achieving the large increases in food production required over the next decade or two is to use less rather than more land.

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Studies both in agricultural technology and economics support this conclusion. However, the development of specific programmes for assisting farmers toward the most appropriate means of increasing their output substantially will depend on research into the economics of farm production. These studies would have the purpose of showing how to fit together to best advantage at the individual farm level the land, buildings, livestock and other resources of the farmer. They would take account of the most suitable production methods and would be set within the context of expected prices and costs.

Considering the extent of the required increase in output, the relative shift toward livestock products which is entailed, and the fact that an adjustment to a district reduction in the labour force and in the number of farms must be made, there is an evident need for providing farmers with concrete illustrations worked out on typical farms of how the appropriate farm management changes might be made considering the resources of the farmer.

This general policy implies not only a shift in emphasis of agricultural extension toward a farm management or production economics approach, but underlines the need for the basic research which would provide the guides to economic adjustment. This research, like the extension programme which would flow from it, would be concerned with such problems as the economy of farms of various sizes, of rotation schemes, of cropping practices, the systems and practices used in livestock enterprises and the economy of labour and machine use in farming.

All this would seem to be near the heart of the Prime Minister's scheme. It is very much to be hoped that the federal government will inspire the necessary land classification and farm management research since most of the provinces concerned do not have resources or personnel to undertake the job.

Our Cover Picture

This faithful St. Bernard dog, complete with brandy keg, seems about to leap to his feet to rescue a snow-bound traveller. This example of snow sculpture was built last winter by some of the students at Macdonald College during the Winter Carnival.

Miracle Drugs and the Beef Farmer

by Eric Bradford

Higher costs and lower prices have been the lot of many Canadian farmers over the last few years. So something that will lower farm costs is a very welcome sight. And that is what "stilbestrol" can do in the beef industry, according to many claims. To-day, in some quarters, it is even being referred to as the most important advance in the beef industry so far this century.



These are the carcasses of the stilbestrol-fed steers referred to in this story.

WHAT is stilbestrol (also referred to as DES), and just how can it be expected to help beef men increase their profits? Under what conditions is it safe to feed it? Some experiments carried out at Macdonald College in the past year help throw some light on this subject.

The technical name for this "miracle" product is Diethylstilbestrol and it is a synthetic estrogen or female hormone. It has been found to improve the rate of gain and feed efficiency of beef cattle and lambs when implanted under the skin in the form of small pellets. Two years ago, it was discovered at Iowa State College that feeding it to beef cattle in small quantities during the finishing period had a similar effect.

As soon as there was sufficient experimental evidence that there was no appreciable estrogenic residue which might affect humans in the meat of stilbestrol-fed cattle, its use for feeding was legalized in the United States, where it has been sold for more than a year now. It is estimated that at least half of the cattle now coming to market in that country have been fed stilbestrol.

DES should not be fed to breeding beef cows, to dairy

animals, or to swine, nor should swine follow cattle which are being fed this product. It appears to be beneficial to cattle on pasture, except that it should probably not be given to cattle on very lush pasture because of the natural estrogens in this type of forage. Incidentally, the pellet implant is a more satisfactory method of administering the hormone to cattle on pasture.

Stilbestrol has been tested on poultry, and in this species it seems to have a quite different effect from what it does with cattle and sheep. In poultry, it promotes fattening much more than it does rate of gain, whereas in beef cattle it increases rate of gain without having much, if any, effect on fattening, and in lambs it increases rate of gain very markedly but decreases carcass fatness. Also in poultry, there appears to be some residual estrogen, at least with the methods of administration used so far, and so the use of stilbestrol has not been legalized for poultry.

Little experimental work with this hormone for beef cattle has been done in this country and it is necessary because of differences in climate, management practices and the type of rations to that in the United States.

Antibiotics are being extensively used in the rations of poultry, swine and young calves because of their beneficial effects on general health and growth rate. Their use in the feeding of ruminant animals has only recently come under investigation. Some experiments on feeding antibiotics to beef cattle have indicated beneficial effects, others have shown no effect. There are several different antibiotics, of course, which may differ from each other in their effects. Aureomycin and terramycin are probably the two most widely used ones in livestock feeding. Penicillin has also been tested, but seems less effective. More extensive testing of more antibiotics is necessary, and considerable work in this field is in progress.

An experiment was carried out by the Animal Husbandry Department at Macdonald College last winter, in which a group of purebred Angus steers being fattened for baby beef were fed rations supplemented with both diethylstilbestrol and with an antibiotic: streptomycin. Streptomycin was included in order to measure the effect of this particular antibiotic alone, and also to see if it would affect the response to stilbestrol.

Twelve 9½ months old steers, averaging 600 pounds in weight, were allotted to four groups of three each. One group received neither supplement, one group received stilbestrol only (10 mgm. per steer per day), one group received streptomycin only (8 mgm. per pound of meal), and one group received both supplements (10 mgm. DES per steer per day plus 8 mgm. streptomycin per pound of meal.)

The basal grain ration was composed of barley meal, 45%, ground oats, 35%, linseed oilmeal and corn gluten feed, 10% each, plus mineral and salt. This mixture was fed at the rate of 1½ pounds per day per 100 pounds liveweight of the steers. In addition, the steers were fed hay and corn silage.

Results of this experiment indicate that stilbestrol has an effect when fed with a typical Canadian ration very similar to that reported from a large number of experiments in the U.S. Streptomycin increased rate of gain when fed as the only supplement, but appeared to have little effect when added to stilbestrol. The effect of streptomycin was not large enough to be conclusive with these numbers of animals, but was sufficient to justify further work.

Actual daily gains for the different groups were: for the control lot, 2.07 pounds; for the stilbestrol group, 2.58 pounds, or 25% more than the control group; for the streptomycin group, 2.41 pounds, an increase over the controls of 16%; and for the group receiving both supplements, 2.64 pounds, 28% more than the group receiving neither supplement. The amounts of grain required per pound of gain for these four groups were 5, 4, 4.3 and 4.25 pounds respectively. All groups ate approximately equal amounts of hay and corn silage. Thus the supplements not only increased rate of gain but decreased the amount of feed required to make this gain.

The length of the feeding period in this experiment was 112 days. No effect of the treatments was observed during the first four weeks, but the experimental groups were well ahead of the control group during the second month and afterwards. In general, it has been found that stilbestrol must be fed for at least 30 days in order to realize any benefit from it. It must be discontinued for at least 48 hours before slaughter.

No effect of either of these supplements on carcass yield or grade was found. This also is consistent with the results of other experiments. These steers dressed 60% and graded 10 "Red Brand", 2 "Blue Brand".

No undesirable side effects were observed. The stilbestrol fed steers had lengthened teats, but showed no elevated tail heads or abnormal behaviour such as was reported in some of the earlier experiments with DES implants. Both supplements seemed to stimulate appetite.

With regard to residue in the meat, it was decided to feed stilbestrol to one group of 3 steers 24 hours before slaughter, rather than the prescribed 48 hours, to determine if the present regulation was justified. A sample of lean meat, fat, liver and kidney was taken from each steer and tested for its content of estrogen. No residue was found in any of the tissues of steers which received no stilbestrol within 48 hours of slaughter, but the lean, fat, and liver of the steers fed stilbestrol 24 hours before slaughter all contained estrogen. *This resulted in the entire carcasses of 3 steers being condemned.*

Not enough of either of these products are being sold in Canada as yet that an average cost figure can be quoted. However, feeders in the United States are finding both stilbestrol and antibiotics economical to feed.

Regulations governing the use of stilbestrol require that it be sold in the form of a prepared supplement. Usually it is mixed with the protein supplement so that either one or two pounds per day will supply the desired amount. The pure substance cannot be purchased by feeders because of the very small amounts used, and because of the danger of some stilbestrol remaining in feed mixers, etc., to contaminate feed for other livestock.

It appears from the results of this and other experiments that feeding diethylstilbestrol to fattening beef cattle at the prescribed level will significantly increase the rate of gain and reduce the amount of feed required per pound of gain. It is most important, however, that no stilbestrol be fed within 48 hours of the time the steers are slaughtered.

Streptomycin increased gains and reduced feed costs slightly in this experiment, but further work is necessary before general recommendations can be made. It should be kept in mind that this is one particular antibiotic, and that results with other antibiotics may be quite different. Further work on these and other new substances is being done, and reports of experimental work of interest to farmers should be appearing with increasing frequency in the future.

THE FARM AND THE MARKET

by

the Staff of Economics Department

What Happened In Last Years Apple Market —

Some of the statistics for the 1955-56 crop year are now available. The apple crop in Canada in 1955 amounted to 19,142,000 bushels—an increase of 32% over 1954 and of 28% over the average production for the nine-year period 1946-54.

The average farm value of the 1955 crop was 57 cents per bushel—a drop of 54% from the year before and of 49% from the average value for the six-year period 1949-54.

The increase in apple production in 1955 was greatest in Quebec where production doubled from 2,500,000 bushels in 1954 to 5,000,000 bushels in 1955. The 1955 crop in Quebec was 180% greater than the average production for the nine-year period 1946-54. In 1955, moreover, there was an unknown but substantial quantity of apples that were never picked or were otherwise wasted.

Among apple-producing provinces, the Quebec price fell the farthest in 1955-56. The average farm value received in Quebec was 39 cents per bushel—a drop of 75% from the year before and of over 76% from the average for the nine-year period 1946-54.

The size of the 1955 apple crop in Canada, the second largest crop on record after that of 1946, would have been enough to cause a sharp fall in price. Unfortunately, there was on hand at the beginning of the 1955-56 crop year an exceptionally large stock of processed apples, and this must have aggravated the surplus situation. On July 1st, 1955, there were 17,853,000 lbs. of processed apples in stock—a 97% increase over the stock of a year before and 59% over the average stocks for the five-year period 1950-54. There is further evidence that the supply of processed apples in 1955 was excessive. The amount of apples processed during the 1955-56 crop year was 6% less than in the previous year, in spite of the much lower price of apples in 1955-56.

Although more apples were exported during 1955-56, and fewer apples were imported, these changes by no means compensated for the larger crop and the increased stocks of processed apples. Exports of fresh apples increased to 2,955,000 bushels—an increase of 36% over the previous year and of 33% over the average exports for the five-year period 1950-54. The U.S.A. and the U.K. continued to be the largest buyers of Canadian apples. The exports of processed apples also were probably stepped up during 1955-56, but no data were available on this. The long-run trend in apples export is not reassuring—exports have been declining both in absolute and relative terms. Over the five-year period 1951-55, average annual exports of fresh apples amounted to 2,269,000 bushels (16% of total Canadian production, compared with 19% in 1943-47 and 42% in 1935-39).

Imports of apples dropped to 738,000 bushels during 1955-56—a decrease of 28% from the previous year when imports were unusually high. Apple imports have been on a long-run upward trend, with which the 1955-56 import figure was not inconsistent.

Migration From The U.S. Farm Population —

Between 1940 and 1950 about 9 million more people left farms in the U.S.A. than settled on farms. This was a much more rapid rate of leaving the farm than during the previous decade 1930-40. The rate of leaving was highest for the young people in the 10-19 years of age category.

A recent U.S.D.A. Bulletin on Farm Population says that migration from farms is usually in response to the attraction in nonfarm areas of: (1) employment opportunities, (2) educational advantages, (3) change of residence for retired persons, (4) marital opportunities, (5) service in the armed forces, or (6) other reasons.

Economic Balance For Agriculture —

Much of the influential thinking on farm policy in Canada rests on some concept of "balance" between agriculture and the rest of the economy. Farm leaders have been becoming increasingly articulate and explicit about their concept of balance, which can best be described as the "golden age" philosophy.

What the "golden age" concept of balance for agriculture really amounts to is this: 1. Agriculture was in a favourable economic relation to other industries at certain periods in the past (e.g. 1925-29). 2. This favourable relationship constitutes a balanced position for agriculture. 3. Therefore farm policy should aim at restoring and maintaining this balance.

Unfortunately, the "golden age" mentality is unrealistic and leads to an appalling waste of human and other resources. It is especially important at the present rapid phase of economic development (when Canada cannot afford to waste manpower and resources) to scrap this

(Please turn to page 12)



FARM FORUM

News and Views

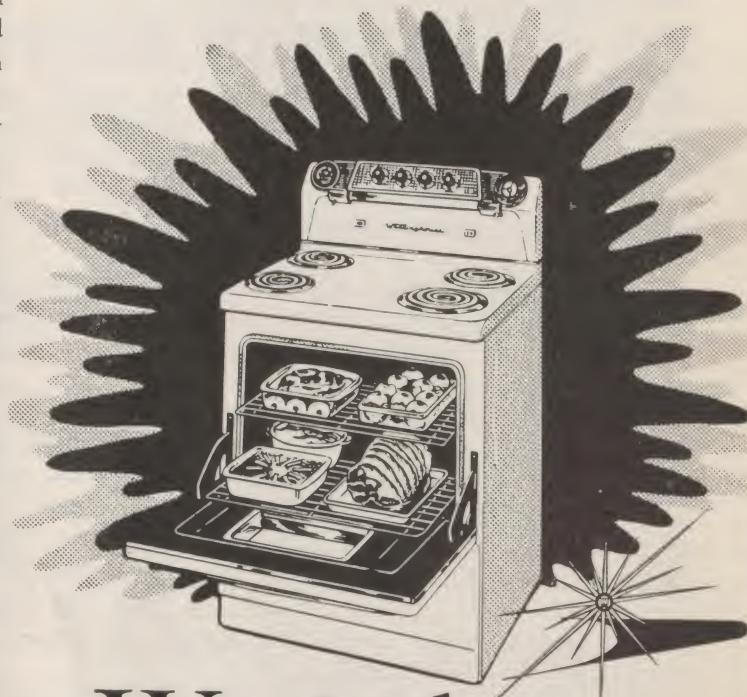
L. G. Young

Notes on Discussion Topics

THE SOIL BANK IDEA — This topic dealt with a soil bank scheme similar to the American plan now in use. Most of the forums were of the opinion that it would not benefit Quebec farmers by reducing surpluses although nine said it would reduce excess production. About 75% thought it would promote soil conservation, particularly in the West. Bedford Forum in Missisquoi replied, "Perhaps it would reduce surpluses in Western Canada, but it would not apply in Quebec as there are no surpluses here. It would build up nitrogen and humus in the soil." Third Range in Sherbrooke raised another question. "In our community we feel that the soil bank might not benefit farmers. We have mixed farming, mostly dairy cattle, and our surpluses are not too great. To cut down on crops would mean buying feed from the West for cattle. The farmer is having a hard time to make ends meet when growing his own feed. A soil bank scheme might help Western farmers to dispose of surplus grains." The fact that eastern Canada is short of feed grains seem to bother many forums.

Nearly all forums were agreed that there was some land nearby which should be taken out of production. The majority of these thought that trees should be planted on it. Quite a few mentioned that farms were being left idle. "In our area the poorer farms are going out of production because with the high cost of farm equipment they have not been able to make a living, and the land on mountain farms that used to be cultivated is now being planted with trees or being left idle. These people find that they make a much better living cutting logs and pulpwood than tilling the soil," answered Mabel in Argenteuil. Creek in Brome made another good point. They emphasized that "Commercial cutting of woodlots and sugar places should be controlled or restricted to conserve our wood supply".

WHAT PRICE EFFICIENCY was the second topic of the December series. 70% of the forums replied that the need for increased efficiency is a major problem in agriculture. Mountain Road in Brome thought that efficiency is very important to the farmer. Their answer: "It is impossible for the small farmer to compete with industry as far as wages are concerned, therefore practically impossible to hire experienced help. In order to operate the farm alone the farmer must be highly efficient in all things." Harrington in Argenteuil said that in any business more efficient methods are being sought and the case is the same for farming. Many of the replies mentioned that greater efficiency generally meant more goods and that this could cause a surplus which would ruin prices.



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They wonder if, should that happen, there is any benefit in being efficient. One forum took a different view and said that quality is a form of efficiency and there is a great need for quality improvement.

When asked if there were too many farmers, 24 said "yes" but 22 disagreed. Most difference of opinion on this question seemed to arise from the word "farmer". Of those answering "no", 8 said there are too many poor farms; 6 said there are too many farmers with other income; and 2 mentioned too many part-time farmers. Many of those who thought there are too many farmers emphasized that there are not enough good farmers and too many inefficient farmers. So it seemed that nearly all agreed that there are too many poor farms and inefficient farmers, but that agriculture needs all the good farmers available.

Good reasons were given for both opinions. Seventh Line in Pontiac believed there are too many farms as they said, "Yes, in some cases. Some farms should be grouped in larger units." Arundel No. 1 disagreed with "We don't think that there are too many farmers. We think that small farmers are better than large farmers, providing they buy and use machinery co-operatively. It is better for the community to have three families on three farms than one family running the three farms." Sutton in Brome mentioned that there are too many "so called" farmers. "So called" includes farmers on poor land, farmers neglecting their farms, and farmers who are farming in only a half hearted manner.

The DOMINION-PROVINCIAL AGRICULTURAL CONFERENCE was the first current topic ever tried on farm forum. It was "current" because it dealt with something which had just happened and there was no written material about it. The only information available was in newspapers and on the broadcast.

The first question on this topic was concerned with the value of the conference. A few forums mentioned that the conference provided good publicity for the farmer and almost twice as many said that it was an opportunity for many interests to get together and exchange views—a good thing, they thought. Almost a third of the replies indicated that as far as they could see the conference had little, if any value. "The value of the conference will not be known till the future, but we would be pleased to reap the benefits at any time. The discussion was sketchy and we did feel any real decisions had been reached", reported Silver Creek of Papineau. Campbell's Bay in Pontiac stated that although little may have been accomplished, the conference should certainly be an annual occurrence.

Fifteen items were suggested by the forums that they considered should have been covered by the conference. Bishopton in Compton answered, "This forum is of the opinion that the marketing of dairy products, beef and pork in Quebec and Ontario could be the subject of another panel discussion as feeder cattle in the West only were mentioned." The majority of the suggestions given concerned eastern mixed farmers.

Forum Whispersings

With the Christmas season upon them, most of the forums were preparing Christmas parties in December. Pontiac forums were concerned with providing a home for some Hungarian refugees who had fled their homeland. Although nothing had been definitely settled, they were looking into the possibilities of furnishing an unused house for a family or two and were hoping to find them work on nearby farms or in the iron mines close by.

High & Low Forest in Compton held a birthday party for a forum member in her 89th year. Miss Mackay helped to organize that forum 16 years ago and has been attending meetings regularly ever since.

Secretary's Notebook:

The topics this year do not seem to be appealing too much to the interests of eastern farmers, judging from recent comments I have heard. In fact, they are apparently so lacking in interest for most Easterners that members are suggesting other topics.

It seems that many forums would like broadcasts which deal with such things as the international situation, and other national questions of a non-farm nature.

Before drastic changes in topics are made the situation will have to be looked into further. But certainly today the businessman, and farmers are businessmen, is affected by the international situation as well as national questions in other sectors of the Canadian economy. Also, farming is becoming more specialized by regions. Specialization naturally makes it harder to select topics that will appeal to farmers all over Canada. So it may be that with the lengthening of the farm businessman's view, our program needs to be given a broader slant.

Perhaps the program needs a form of specialization as farming becomes specialized. If so the national broadcasts will have to deal with national and international questions and it must fall to the provinces to provide information of regional interest. Quebec has already tried this idea once. It is yet too early to tell whether or not it has been a success. If it has been successful, Farm Radio Forum may appear next season with, as the advertisers say, the "new look".





DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec Department of Agriculture

Brighter Future for Farmers?

Dominion-Provincial Conference Looks Ahead

LESS pessimism than has been the case, the last three or four years was evident at the annual federal-provincial agricultural conference at Ottawa this year. Popularly known as the Farmers' Parliament, it gathers representatives from all the provincial departments of agriculture and the farm organizations plus a few other interested parties to listen to federal government reports covering the present situation of the farming industry across Canada, and the prospects for the coming year. Here, too, government officials listen to particular provincial problems and to briefs from farm organizations — Canadian Federation of Agriculture and the Farmer's Union — on the weak spots in the economy and the possible cures for them.

Hon. J. G. Gardiner, federal minister of agriculture, started and ended the conference on an optimistic note. He started by saying "In every particular, 1956 promises to be a better year than the average of the last 10 and almost equal to the average of the last five — the best five years we have ever experienced". His summary at the end was:

1. "The Canadian farmers' position in relation to income has improved over the past two years and will continue to do so in 1957 and will probably go on to reach the peak level it attained in 1951 . . ."

2. "We all agree that the increase in the farmers' income has been accompanied by an increase in costs of production and this has retarded the farmer considerably . . ."
3. "I think the farmer would be well advised to follow the same course as he did last year as related to what he produces and markets . . ."
4. "I think it was generally agreed by all delegates that all forms of assistance by Federal and provincial governments should be continued. I would remind you, however that the government paid out more than one billion dollars in assistance to the agricultural industry over the past 10 years." The provinces had also contributed about the same amount.

While both Dr. H. H. Hannam, president of the Canadian Federation of Agriculture and O. Turnbull of Saskatchewan, representing the Farm Unions, were glad to hear reports that gross farm income was increasing they emphasized that the farmer was still far behind the rest of the economy and that his net position had little likelihood of increasing greatly. Dr. Hannam said that "1956 has been marked by price inflation in the non-farm sectors of Canada's economy and that as a result the relationship between the prices the farmer re-



Quebec's Delegation included Dr. Georges Gauthier, seated at left between Minister of Agriculture Gardiner and S. J. Chagnon, Assistant Deputy Minister at Ottawa, Benoit Lavigne, Rural Economics Service, Ernest Dube, Chief Extension Service, and Deputy Minister Rene Trepanier.

ceives and those he pays has not improved. — in fact it has deteriorated." He felt that farm income would be below parity for some time yet.

Gilbert MacMillan, president of the Dairy Farmers of Canada, noted that butter consumption during 1956 increased and production decreased, so that for the first time in several years butter stocks at the end of the year will be considerably below year ago figures. He reiterated the importance of the floor price on butter stabilizing the whole dairy industry. Whether the dairy industry can now start to look forward to a period of relative improvement depends on whether it is protected from the low-price competition from New Zealand and Australian dairy products.

The Farm Union spokesman, Mr. Turnbull, claimed that agricultural support legislation has in 10 years only been put to token use for a small number of farm products and has been practically meaningless in respect to national need. He said that a policy for a healthy farm economy should effect a) conservation of soil and human resources; b) improvement of rural institutions and c) agricultural stability.

Provincial spokesmen and delegates from farm organizations expressed concern chiefly over the need for broader credit facilities through which farmers can get capital to finance higher costs, particularly for mechanization. Concern was also expressed over the current high rates of interest.

There were frequent references to the shortage of farm labour and one report called for more immigration as a solution.

Highlights of some government reports were:

1. A continuation of the current level of prosperity would provide a good domestic market for the dairy products that are expected to be produced in 1957. Higher average annual prices to producers than in 1956 are expected in milk for the fluid market, for cheese and for some concentrated products. This along with higher processing costs, may be reflected in higher consumer prices.

2. Total meat production in 1956 was not far below the all-time high of 1.9 billion lb. in 1944. In 1957 output is expected to remain quite high, with some reduction in pork offset by larger supplies of beef.

3. Hog supplies in the first half of 1957 may be about 14 per cent less than in 1956, with prices expected to remain strong. Marketings are expected to overtake 1956 levels some time in the second half of the year, with the July to December total about as high as or slightly higher than 1956. This would give a total for the year of slightly over 5½ million head or nearly half a million below this year.

4. Beef cattle marketings, at record levels in 1956, are expected to increase further next year, with steer and



Ministers of Agriculture at the Dominion-Provincial Conference. Seated, Hon. I. C. Nollet, Saskatchewan, Hon. J. G. Gardiner, Canada, Dr. A. M. Shaw, Conference Chairman, Hon. C. B. Sherwood, New Brunswick, Hon. C. E. Shuttleworth, Manitoba. Standing, Hon. E. D. Haliburton, Nova Scotia, Hon. W. R. Chetwynd, British Columbia, Hon. L. C. Halmrast, Alberta, Hon. E. Cullen, Prince Edward Island, Dr. J. G. Taggart, Deputy Minister, Canada.

heifer slaughterings likely to be from 5 to 10 per cent higher. With beef prices likely to be in favourable relationship to pork from the consumer standpoint, beef consumption may show a further gain over record 1956 levels. Although some seasonal weakness in cattle prices is expected, strong domestic demand for meat, higher pork prices and firmer U.S. beef markets are looked upon as stabilizing factors.

5. Calf marketings, which approached a record 1 million head in 1956, are expected to show a further increase in 1957, reflecting the continued build-up in cattle population.

6. Sheep and lamb marketings, expected to slightly top 600,000 head this year, are not expected to change greatly in 1957. However, slightly better prices are reported to have created a stronger demand for breeding stock this fall and a moderate increase in sheep population may be under way.

7. Poultry meat production, at high levels in 1956 (particularly chicken and turkey broilers) is expected to show further advances in 1957 in both Canada and the U.S.A.



214-56

The County Agronomist

by Roland L'Esperance

NO MATTER what they are called—agronomes in Quebec, agricultural representatives in other provinces, county agents in the United States, agricultural counsellors in Europe—trained agricultural scientists labour unceasingly to help farmers achieve the best possible results in their operations.

In Quebec, the United Kingdom, Belgium, the Netherlands, and in most of the United States, this agronomic service is administered, directed, and financed by the government. The county agronomist in Quebec, a man who is appointed to a permanent post in one particular section of the province, is an employee of the Extension Service of the Department of Agriculture who acts as liaison between the Department, the agricultural colleges and research stations, and the farmers in his district.

The first county agronomists were appointed in the fall of 1913; but a few months before this, Macdonald College, which had graduated its first class of Bachelors of Science in Agriculture in the spring of 1912, had appointed some of its more highly qualified graduates as "demonstrators" in certain parts of the province where the population was predominantly English-speaking. These demonstrators remained on the job until 1916.

When the Provincial Government established its service, it set up five districts and appointed an agronomist to each; Raphael Rousseau for Bagot and Drummond, Jean Charles Magnan for Portneuf and Champlain, Henri Cloutier for Rouville and Iberville, Abel Raymond for Bellechasse and Dorchester and Alphonse Roy for Montmagny and Quebec. Within ten years there was hardly a single rural county which did not have its own agronomist.

By 1956 the staff of the Extension Service had increased to 90 clerks and secretaries, and 153 technicians, comprising 1 director, 3 special officers, 2 men attached to the agricultural societies division, 5 to the farm labour bureau, 5 sugar beet specialists and 139 county or district agronomists.

Today, as a general rule, the county agronomist restricts his activities to the boundaries of a single county. In the larger counties he will have assistance, for it is sometimes impossible for a single man to cover the area contained in some of the larger counties, nor is it possible for farmers to come to the agronomist's office for help and advice on account of the distance involved. Therefore, some county agronomists have one, two and even three assistants, each with his own headquarters. There are 67 rural counties in the province; 6 of them have three agronomists, and 39 have two.

All was not smooth sailing for these pioneer agronomists back in 1913. Farmers of those days were rugged individualists, used to doing things in a certain way and not

easily persuaded to change. They knew little or nothing of the application of science to agriculture, and in many cases were suspicious of new ideas. The first task of the early agronomist was to break down the prejudices and get themselves and their "radical" ideas accepted by the farmers. Realizing that it would be next to impossible to appeal to the older generation, they concentrated on the young people on the farms; they organized school gardens and exhibitions, built up young farmers clubs devoted to hogs, calves, purebred sheep, registered heifers and so forth. It was not long before the enthusiasm of these young people communicated itself to their parents, and the agronomists had established their contacts. Much of the expansion in the agronomic service that occurred up to 1923 came about as a result of a demand from the very farmers who had been so apathetic in the early days.

The increased responsibilities of the agronomists to their constituents brought about a need for highly-trained men to man the service, and today the county agronomist has the scientific knowledge and the personality that permits him to take an active part in all phases of rural life in the territory for which he is responsible.

To deal with problems which may arise in certain areas where some specialized crop is grown, the Extension Service has on its staff a corps of specialists who go into any area where their services may be required. These specialists (in tobacco, poultry, sugar beets, to name only three), work in close collaboration with the county agronomist, amplifying rather than replacing his work, for the county agronomist knows better than anyone else the particular features of his own territory, the ability and efficiency of the farmers for whom he is responsible, and, further, he has the administrative machinery to put the specialists in touch with the farmers. In many cases the



Organizing field days is but one of the agronomist's duties.

county agronomist himself invites the specialists to come into his territory to make a study of pressing problems, to organize study campaigns, etc. And, in the course of this collaboration, the county man adds to his own knowledge and understanding of particular problems.

The county agronomist is not only a highly-trained technician; a man who passes his scientific know-how on to the farmers. He has to be a good organizer and a good economist, capable of directing production in his territory into the channels which will meet market demands; and he must see to it that his farmers organize their production, be it field crops, livestock, poultry, hogs, or anything else, in such a way as to make the best use of his land, equipment, and labour.

We can get a better idea of what a typical county agronomist does if we follow him throughout the year as he goes about his duties. All of it cannot be covered in this article; more will come later.

January, February and March are quiet months on most farms, but this part of the year is a busy one for the agronomist. It is a good time for him to travel the length and breadth of his territory, visiting his farmers to see how they are getting along and to offer suggestions for next season's work. He will take advantage of his visits to whip up interest in the short courses in poultry raising which will be given in various parts of the province at the end of January and the beginning of February.

He will likely help to organize and preside over a study-day on the use and maintenance of farm machines, and the use of electricity on the farm at a series of meetings arranged by the agricultural engineering department of an agricultural college, the extension department of an electric company, and the Co-operative Federee. There will be other study days which he will be expected to attend, if not organize. These are set up by the local branches of the U.C.C. and similar organizations. Later in the period he will probably collaborate with some of the Department's specialists to hold study sessions on field husbandry, including the use of fertilizers and lime, pasture improvement and the like. If he is in a district where vegetable crops are grown on a considerable scale he will be called to attend meetings of growers, where his experience will be called on to settle problems of production and marketing, the signing of contracts with canning companies and so forth.

Agricultural co-operatives play a large part in the economy of Quebec farming, and the agronomist takes a very active part in all phases of co-operation in their districts, particularly among the smaller co-operatives which do not have the means to employ technicians of their own.

Many agronomists are secretaries of agricultural societies, and in January comes the task of making up balance sheets and setting up annual meetings. In those districts where farm improvement contests are in vogue, the



Barn days give the agronomist a chance to get farmers together to discuss methods. He will attend many of these in the course of a year.

agronomist visits the contestants during the slack season to help with plans for the coming summer, giving advice on herd improvement, checking on their accounting systems, etc.

He takes advantage of the opportunity to go to meetings of 4-H clubs and to organize short courses for them on co-operation, accounting and so on. This part of his work has increased recently with the transfer of responsibility for these clubs from the Federal to the Provincial field.

When all these and many other tasks have been accomplished, our agronomist may find a few days when he can bring himself up to date with his reading, for there are many leaflets, articles and bulletins he should be familiar with. And if that were not enough, there will be many other demands on his time; surveys to be undertaken for the Department, reports on conditions in his territory to be made out, figures to be compiled for the Bureau of Statistics—the list could be prolonged almost indefinitely.

Activities such as have been mentioned will continue more or less throughout the whole year, but with the coming of spring the work of the agronomist will be concentrated to a great extent on preparations for the cropping season. He will visit the contestants in the farm contests again, to help them put their plans into action. He will be asked by the Cercles Fermieres to give them advice on improving the looks of their farm homes through landscaping; perhaps on improving the appearance of the whole village. He will be expected to advise on the pruning of apple trees, on drainage, on soil preparation, pasture improvement and a host of other problems bothering individual farmers. He will have to find time to look over experimental pasture plots which he probably helped the Field Husbandry Service set out, to see how the various mixtures survived the winter, and to collect and prepare the information to pass it on to the farmers. A

little later he will be asked for advice on making and operating hot beds where truck gardeners are starting tomatoes and other vegetable plants, and on spraying orchards. Also, in June he will try to see farmers who want help and advice on making grass silage.

The agronomist does not wait for the farmer to come to him; he goes to the farmers whenever possible, to tell them about new ideas, new methods that can help, and to explain government policies that operate for their benefit.

He never loses an opportunity to preach the doctrine of milking records, whether it be R.O.P. or the provincial postal system, and to remind his farmers that they have various means of improving their livestock herds through the government's assistance with artificial insemination, purchase bonuses for purebred sires, etc.

The Drainage Service makes use of the agronomist in planning its operations of farm improvement by draining and clearing poor land. He is asked to get farmers interested in the services offered, and often undertakes to make up a schedule for the visits of the machines, to see that the work is done satisfactorily, and to oversee operations generally. This part of his work also includes supervision of programmes of stone removal and land levelling aimed at bringing more land under cultivation.

Agronomists in districts where sugar beets are grown for the Quebec Refinery have a responsibility to growers, to check on the location of cultivating and harvesting machinery used during the previous year, and making them available where and when needed. They advise on the choice of land to be used for beets, look over contracts for production and, later, give demonstrations on seeding, thinning, etc. And there are other special crops on which they must be prepared to give advice—flax, soya beans, fall wheat, to name a few.

More about the county agronomist and his responsibilities will appear in a later issue.

To Be Featured At The Salon

TWENTY Quebec hatcheries will have exhibits in the baby chick contest which will be a feature of this year's National Salon of Agriculture. Each exhibit will display 25 chicks, selected from the best known lines, either for meat production, egg production, or dual purpose birds.

The exhibit will show what a day-old chick of high quality stock, hatched under ideal conditions and true to type of its line, should look like as regards health, vigour and vitality. In charge of the project are Ubald Pilon, Chief of the Poultry Division of the Department of Agriculture, Noe Henault, regional inspector of poultry products, and Jean B. Roy, secretary-manager of the Quebec Poultry Co-operative.

Another exhibit receiving a lot of advance publicity is the booth of the New Brunswick Department of Agriculture, which will feature the potato. This has been a popular booth for the past two years, and we are

assured that this year's display will be of the same high order. On February 12th New Brunswick's Potato Queen, Miss Odette Ouellette, will be in attendance with her two ladies-in-waiting, Miss Jacqueline Fraser and Miss Wilma Godbout, and during the evening Minister of Agriculture C. B. Sherwood and J. Roger Pichette, the Minister of Industry and Development, will speak.

Choosing A Dairy Queen

The five days from February 11th to 15th inclusive will feature contests to choose a Dairy Queen. The contest is sponsored by the Quebec Section of the Holstein Freisian Association of Canada and its 16 clubs, and the chairman will be the Hon. Antonio Elie, Minister without Portfolio and a former president of the Quebec Section.

Each club will present a contestant, and on each of the nights of the contest the contestants will milk a Holstein cow, and prove she knows how to handle milk and milking equipment according to the best sanitary methods. A three-man jury of dairy experts will be the judges. A total of \$700 has been set aside for prizes.

Agronomist Promoted

Fernand Beaudet, Three Rivers agronomist since 1938, has been appointed Professor of Animal Husbandry at St. Hyacinthe Veterinary School.

A graduate of Oka in the class of 1934, he spent three years at the Provincial Dairy School taking specialized work in dairy technology, then joined the staff of the Department of Agriculture. Since his appointment he has been stationed in the Three Rivers area.

Popular Agronomist Feted

Leon Beaudin, Huntingdon County agronomist, has just completed his twenty-fifth year of service with the Department of Agriculture. The anniversary did not go unnoticed, for his friends and admirers got together early in December to organize a banquet in his honour at the Huntingdon Chateau. His colleagues in the Extension Service, farmers and breeders to whom he has rendered unstinting service, turned out in spite of almost impossible driving conditions to wish him well, and to present him with a purse as evidence of their feelings. Mrs. Beaudin, who shared the limelight with her husband, was presented with a magnificent bouquet of roses.

Mr. Beaudin is a "native son", for he was born at St. Chrysostome in Chateauguay County and took his High School training at Ormstown. Then he went to Macdonald College for his agricultural training where he earned his B.S.A. degree. He worked with the Holstein Breeders Association for a time after graduation on milking records, then entered the service of the Department of Agriculture in 1931 as assistant to the late Alex Bothwell at Lachute. He next had a tour of duty as county agronomist for Labelle with headquarters at Mont Laurier, then went to Richmond County, and finally was appointed to Huntingdon in 1948.

The Journal joins in congratulations and good wishes to Mr. Beaudin.

Less Honey Last Year

BEEKEEPING is losing ground in Quebec, according to the man who should know, J. R. Methot of the Department of Agriculture. Speaking at the annual meeting of the Quebec Beekeepers' Association recently, he pointed out that while there were 3,252 professional apiculturists in the province in 1955, there were only 2,691 in 1956. Low prices for honey, and more attractive wages offered by industry were, he thought, the main factors contributing to the decline. He was also alarmed to note that few of the younger men seem to be planning to keep on with bees.

There is poor distribution of honey in the province, too; in many areas the consumer is not able to find good Quebec honey for sale, and Mr. Methot advocated the creation of a distribution and sales committee within the Association which would try to see that Quebec honey would be available to anyone who wanted to buy it, and which would see that prices would be such as to guarantee a reasonable return to the farmers while still keeping the cost to the consumer attractive. In this effort, he went on to say, the Department would collaborate fully.

Total production in Quebec in 1956 was 2,941,000 pounds, an average of 57 pounds per colony. More diseased colonies had been discovered by provincial inspectors than usual, but there had been much fewer winter losses. And these winter losses could be cut drastically if beekeepers would only take the proper precautions at the proper time.

Rene Brosseur, Vaudreuil, the group's technical advisor, told the delegates that the cool, wet summer was the main reason for the sharp drop from the normal crop of around four million pounds. He also said that the Quebec families consume nearly five million pounds of honey annually.

Another speaker on the first day, G. A. Jamieson, federal apiarist, told the beekeepers that a method of keeping more than one queen bee happy in the same hive had been discovered. The solution was to clip part of the queen bee's antennae. However, it was not of any practical value because clipping the antennae resulted in a disorganized system of egg laying. Without their antennae the queens laid as many as eight eggs in one cell, while they laid none in others.

So that their findings may have some practical value the culture division of the Canada Department of Agriculture is working on a method of developing both good qualities — proper egg laying and harmonious relations between queens. One way may be to cover the segments of the antennae with a plastic material.

In the elections C. E. Muir, Vaudreuil, was named chairman of the Association's English-speaking section.

Montreal Gardeners Meet

A major feature of the annual meeting of the Montreal Market Gardeners' Association, held last month in Montreal, was a report from the president, Adrien Moquin, on the progress being made on the new Montreal Farmers' Market. The work on preparation of the site, draining, etc., has been completed during the past summer at a cost of \$125,000. Actual construction commenced in August and it is expected to be completed by next May, and it is not expected that the cost will exceed \$500,000. The president urged all individuals and groups who have subscribed for shares in the project to pay for them as soon as possible so that the work will not be held up for lack of funds, and so that work can be proceeded with for the erection of a storage house and a winter market to be used by farmers and wholesalers.

Minister of Agriculture Barre, who attended the closing banquet, emphasized that the Department of Agriculture has a large stake in the new market, since it has promised a grant of \$1,000,000 to be paid in instalments. He hoped that others whom the market would benefit would prove to be equally generous. He took occasion in the course of his speech to deplore the fact that so much farming land in the Montreal area is going out of production, and he appealed to all farmers to hold onto their land, improve it and to will it to their sons.

On the technical side, Fernand Godbout, Edouard Lavalle, R. D. Cartier, Leo Raynault and Alex. Dion, of the Provincial Plant Protection Bureau, conducted a discussion on the control of insects and plant diseases.

Among resolutions adopted was one suggesting that the Experimental Sub-Station at Ste. Clotilde be organized into an Experimental Farm specializing in vegetable crops. Another asked that the weights of consumer packs of vegetables be standardized.

(Continued from page 4)

nostalgic and obsolete concept of balance for agriculture and replace it with one that looks forward (rather than backward) with courage and confidence. This forward-looking mentality envisages agriculture progressing and prospering *in step and in sympathy with the other sectors of the economy*.

This is an auspicious time for creative thinking. An election is in the offing and the political parties are re-examining their farm policies. Also, the report of the Royal Commission on Canada's Economic Prospects will soon be out to point the way. The Commission has been scanning Canada's economic horizon from the standpoint of facilitating progress on all fronts. Finally, this is an auspicious time for agriculture to adopt a progressive concept of balance, because, after five hard years, farming is facing a brighter future in the New Year.

Dear Readers:

Are you taking an active part in your Farm Forum this winter? Our Forum entertained at a party during the festive season. We played games, sang songs, and presented a gift to each child, and served sandwiches, tea-cakes and ice-cream. The High-Low Forest Forum welcomed newlyweds, Mr. and Mrs. Roland Lowry, to their organization by presenting them with a gift. Mr. and Mrs. Frank McConnell opened their home on another Forum night to a large gathering in honour of a very popular member's eighty-ninth birthday. Miss MacKay was accompanied to her party by her brother, Wilbur now in his eightieth year. They were active in organizing the first Forum in the district sixteen years ago. They and another brother who met an accidental death a few years ago have encouraged several of the younger generation toward the goal of better farming, adult education and medical doctoring. Former students from MacDonald College will remember summers spent with this family in their lovely farm home, now owned by Mr. and Mrs. Hazen Lowry, while they live in retirement in nearby Sawyerville. The MacKay brothers conducted a class on farming at the first Community School held here just before Farm Forum began. Miss MacKay has a Life Membership in the Sawyerville Institution in recognition of her years of service, and was recently entertained at a birthday party by them. Her artistic ability was displayed by that Institute at an art exhibit held at a recent county convention. The paintings depicted the life that she knows best, and brought out the beauty of country life as she saw it — a mare and colt by a rail fence in a lush green meadow, a hen scratching for her brood of young chickens, and the orchard in bloom with each limb of the trees and the blossoms in their exact position made a painting of perfection.

It's Results that Count!



MASTER FEEDS

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The Forest Forum has entertained our Forum and visited us at Graydon Montgomery's home; then they had their usual Christmas party with special treats, games, and music, all of which were enjoyed by all. Mrs. Vern Wilson, their active secretary, was presented with a gift. Is it any wonder they have a membership of nineteen families, with all the activities that take place over there? Their ambition is to encourage the one remaining family to join their group.

Farm Forum topics seem to be written up with more enthusiasm by the leading farm newspapers. Is it because the press is at last noticing our daily reading needs? "More efficient farmers" and "Fewer farmers by government-assisted relocation" have been two articles I've just finished reading. In the first article I thought more efficient use of bookkeeping could have been stressed. Then, too, there was the question of modern, scientific methods. The bookkeeping is all right; the farmer can encourage his wife to do this if necessary, but it often seems to me that the new and more scientific methods are often

beyond the means of the average farmer. It is true we do learn a considerable amount from the so-called "hobby farmer" who uses his farm as a place to invest his savings. The experimental station helps us out in this way too. But I still think a lot of our ideas and plans are formed by what we read. There is no time better for this than a stormy winter day. We can follow it up by planning while we dump the pig's meal or milk out the cows.

It was within the last quarter of a century that the government relocated hard-pressed urbanites into our vast forests. I first saw them living in shacks with a lean-to for a horse and cow, and I had small hopes for their survival. I returned to this part of the country again last summer and was surprised to see fertile farms on gently-rolling slopes. I'm sure these people won't be among those to be relocated.

Well, good luck with that sled you're making.

Sincerely,

Wally.

Our New Canadians

Everywhere one goes in Canada there are to be found the charm of voices not yet fully accustomed to a new language, and an energetic application to the duties they take on.

Where do all these new Canadians come from?

During 1955, just over one-sixth, or 10,661 of the persons naturalized in 1955 had been citizens of Poland. Those of Italian origin counted to 4,500 and countries of the British Commonwealth gave us 3,700.

The Netherlands gave Canada some 3,500 citizens, while people of Russian and Chinese ancestry applying for citizenship certificates were somewhat over 2,000 in each case. People of Lithuanian and Latvian origin were similarly listed.

Of 58,711 people receiving Canadian citizenship certificates in 1955, there were 13,332 who considered themselves stateless when applying. Almost half this number were born in Poland, one-fifth within the present boundaries of the USSR and one-quarter in Austria, Czechoslovakia, Germany and Hungary.

Over 85% of the new citizens arrived in Canada after World War II.

Where are these new citizens located?

At the time of naturalization over half their number were living in Ontario, with 17% in Quebec, 15% in the prairie provinces and the remainder divided between British Columbia and the Maritime provinces.

Farm Cash Income Higher

Cash income received by Canadian farmers from the sale of farm products in the first nine months of 1956 totalled \$1,875 million — a gain of 11 per cent over the same period in 1955. The all-time high for the first three quarters was \$1,961 millions, in

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1953. Higher returns from sales of grain (including participation payments), cattle and calves, poultry and eggs were major factors in this year's higher income. Increased wheat sales were the biggest single factor and contributed largely to a 38 per cent gain in Saskatchewan cash income.

Total cash income from livestock sales from January to September this year was \$518 millions, of which \$299 millions came from cattle and calves (up 5 per cent from last year) and \$214 millions from hogs (little change from a year ago).

Spending The June Set-Aside

Dairy Farmers of Canada, the national producers' organization, will spend \$372,000 for advertising and promotion of dairy foods in 1957.

In making this decision directors from across Canada noted the effectiveness of the more than \$2,000,000 which had been spent in advertising by dairy producers since 1950. Increased per capita consumption of dairy foods all along the line had been noted in

1955, the last period for which complete figures were available. Canadians ate an average of 1,037 pounds of dairy foods in the year.

Dairy Farmers officials point out that a budget of \$372,000 is inadequate for the job of dairy foods promotion which needs to be done in Canada. As an example they cite the case of fluid milk consumption which in itself is low on a per capita basis. In a country where one third of the population is children the per capita consumption of three quarters of a pint of milk per person per day means that a great many people who should be doing so are getting no milk at all. Nutritionists are increasingly disturbed by the fact that older people do not get sufficient calcium which can be most easily and economically secured from milk and milk products.

Six month-long promotions will be run in 1957 by Dairy Farmers, as follows:— February, concentrated products; March, butter; April, fluid milk; June, all dairy foods related to summer eating; October, cheese; November, butter.



THE WOMEN'S INSTITUTES SECTION

*and to matters of interest to them
Devoted to the activities of the Quebec Institutes*

THE YOUNGER MEMBER

by Catherine I. Mackenzie

THE last time your Education Convenor had the honour of addressing the Institute members through this Journal, it was to convey a message to the older member. May I now address myself to the younger married woman on a subject that I think only she can deal with.

The priceless ruby extolled by King Solomon was certainly the younger Institute member. Who else but she arises while yet it is night, and giveth meat to the household? Then she setteth her bread and starteth her washing machine. She is not afraid of the snow for her household, for all her children are clothed with warm scarlet woollies. Her cookie jar is filled with spicy delights, and her deep freeze is well stocked. The Institute courses are mentioned for she seeketh wool and flax, and worketh willingly with her hands. The Convenor of Agriculture considereth a field and buyeth it, with the fruit of her hand she planteth a vineyard. The Sunshine Convenor is recognized for she stretcheth forth her hands to the needy.

Yes, our members are still doing the same duties King Solomon praised them for, so long ago. However, even Solomon did not realize that his description of an Institute member is incomplete, for he does not mention her public service. The modern woman must help in the betterment of her village.

Law Enforcement

Is there in your village a tavern where the liquor laws are not obeyed, and what is worse, nobody seems to care? King Solomon in the same chapter says that the leaders and princes drink and forget the law. If they do, then the women will have to remind them of their duty. It is part of our education to obey the laws ourselves, and our duty to see that others do. What others? Our children!

This came home to me from an editorial in our local weekly that the law prohibiting the sale of liquor to minors is not observed. Do not shrug off your duty by saying, "My children are not among them". If your children are taunted by their friends and companions with the taunt of "chicken", they may follow the other fellow into the bar, girls among them. Young girls are invited by older men into the hotel grill, where drinks are served. Someone has to protect our young people from themselves, for the forces of evil are ever on the alert to catch the boys and girls.

A former principal of my school used to say, "The forces of evil are well organized, vigilant, and they work twenty-four hours a day. The forces of good lack coherent organization, are frequently careless, and they work intermittently".

Now, if all the mothers of young daughters and sons would work continuously to see that the liquor laws are obeyed in their village, the forces of good would get a big uplift, and the forces of evil might begin to tremble. How to go about it? First see what the law says, and find one who administers it, then begin to squeeze there. Sound out your provincial member and enlist his interest and particularly rouse the conscience of the community. We Canadians have not very strict ideas about law enforcement. Laws seem to be made to be broken and even the best of us are not shocked. The sign, "Forbidden" usually strikes our minds as "Try it, and see what happens". Do not write letters to your newspaper unless you are sure of your facts.

Do not act on a lurid tale from the village gossip that a girl of fifteen was seen being thrown out of the tavern one night recently. You need to know from the gossip the name of the tavern, the date, the exact time, the girl's name, her age, names of witnesses, written statement from them, and then you must have her follow up the case by laying a charge against the tavern keeper, for the right authority. Will your gossip go to all that trouble? Oh no! She will recoil in horror. The tavern keeper knows that he is perfectly safe and continues to sell drinks to minors. Do not forget that the person who offers a drink to a minor is also guilty of a crime.

However, if the tavern keeper is aware that the villagers are interested in seeing the law obeyed, he may keep a stricter eye on his clientele and begin to observe the law himself. This may last a while for he does not wish to lose his license or create enemies. That is when the forces of good retire and at the very moment the vigilance of the forces of evil snaps into action and the law is flagrantly disregarded. The forces of good must work continuously and drive the tavern keeper to compliance with the law. The young people will soon learn not to go to that tavern, but must seek a new dive, perhaps a roadside place at a little distance. Hence the road accidents. If your vigilance can make the tavern keeper observe the liquor law, and

drivers to obey the traffic law, you will deserve very well of your fellow citizens.

Hospitality

All the foregoing is very discouraging and you are ready to give up. Then "I have my own children to think of". The boys that go about with your son and the lad that takes your daughter for a drive after skating. Have they anywhere to go in the evening? Open your own home to them. Give them rein at home, with the noise and raiding the pantry, and your husband fretting at the disturbance to his peaceful television viewing. It takes its toll but nothing compared with the anxiety their late hours out would cause you. If your house has the space for their entertainment, give it to them. There are lots of young folk whose homes do not afford such opportunities.

Now, don'ts:—Don't commence the next day on the manners of your daughter's guests or in any way disparage the party. That will certainly drive them all out, first to the ice-cream parlor and finally to the pub and you did it! It is hard work to be a patient mother and accept the withering comments of your children and the grumbling of your husband. King Solomon in the same chapter says you will get your reward. Her children rise up and call her blessed, her husband also, and he praiseth her. To achieve this blessing takes time. You must begin early to let them entertain at home. Your carefully planned rumpus room is early abandoned to become a lumber room, and they invade and occupy the rest of their sojourn at home, the room you have so beautifully arranged for your own entertaining. Young people never seem to want to rumpus in the place provided. If your living-room must be sacrificed put your television and your husband elsewhere. At this moment he is not praising you. That comes later, much later.

Your children must co-operate. They should tidy and wash up, as well as help get the party ready. Don't comment on what they like to eat, and don't ask who the grandfathers of the guests were. Accept them cheerfully and hospitably and let them alone. If your daughter has a favorite friend of yours, she calls "Aunt Lil", ask Lil to invite your crowd once in a while. The guests will tell you what a wonderful time they had at Lil's and such good food. Don't be jealous and don't ask afterwards how they behaved. If it becomes a habit to frequent your house your own children and the children of less happy homes are saved.

Drinking is becoming very general with young people who think it smart. There is always a lad with a flask at a school dance, and there is always an exaggerated account of what happened, echoes of which will reach all ears. Have the school authorities look into it with all discretion. It may be smart to take a drink, but it is not at all smart to take to drink. The people of importance, their sons and their daughters, often set the example.

You may call your education on the road to completion when your own children, their friends and neighbours arrive safely at maturity. "Many daughters have done virtuously but thou excellest them all". Pass on your hard gained knowledge to your friends.

OFFICE HAPPENINGS

Latest news on the postponed Conference of the Associated Country Women of the World is this resolution passed at the December executive meeting of the ACWW: "Although venues other than Ceylon had been suggested for the 8th Triennial Conference, the meeting felt that at this moment they wished to continue to explore the possibility of still holding the Conference in Ceylon. Mrs. Berry is to be asked to consult with the Lanka Mahila Samiti on the possible time". Mrs. Berry expected to arrive in Ceylon about the middle of December. She was spending a few days with the officers of the Samiti before flying on to Australia. A special meeting of the ACWW Executive Committee was planned for Jan. 10th, "when this vital matter will be reconsidered". Tentative plans call for the same time, December, in 1957.

Mrs. Harvey arrived home the first of December. A rough passage both going and coming she says, but much to her surprise she proved a good sailor. It is expected the Conference souvenirs will be stored in Ceylon.

A letter of thanks has been received from Mrs. K. Kuppuswamy, Mysore, India, for the gift of the two sewing machines. "We are very grateful to our sisters in Quebec for this generous gift", she writes, and goes on to say they will enable another dozen women to earn their living. Earlier in the year, the Institutes of British Columbia made a similar gift.

Salon of Agriculture

Miss Janet McOuat is representing the Q.W.I. again this year on the Women's Committee connected with the 1957 Salon of Agriculture. The dates are Feb. 8-17, and the theme is "Madam Receives . . . at tea, at luncheon, at dinner". Tentative plans are being made for a demonstration on table setting, by Henry Morgan & Sons, and others on poultry, sandwiches and canapés. Miss McOuat is giving the last two. There will be English sections on three days instead of one exclusive day as was done last year. Mrs. D. A. Killam, Canadian Association of Consumers (Quebec English Branch) is the other representative from an English organization.

What Others Are Doing

The Right Hon. Thibaudeau Rinfret, Chairman of the Commission on the Revision of the Quebec Civil Code, was the speaker at the last meeting of the Montreal Council of Women. He assured his audience that he would recommend to the Attorney-General that the resolutions presented by the federated societies of the Council, on the status of married women, be incorporated in the revised code. "I hope the Provincial Government will agree", he added.

At the CAC meeting this month it was reported a new branch had been formed at Farnham. There is now a total membership in the province of 3813. The use of certificates, coupons, trading stamps, etc. was deplored. Can consumers be educated not to purchase goods using these devices? Doubtful, seemed to be the concensus of the meeting.

Semi-Annual Board Meeting

This mid-year gathering will be held Feb. 8-9 (Friday and Saturday) at the Y.W.C.A., Montreal. The first session will be at 2.00 p.m. on Friday and the usual Joint Conference with representatives from the Montreal Council of Women will occupy another session. Tentative plans are being made for a meeting of the Junior Counsellors on the previous day, Feb. 7th, at the same place.

Thank You

The Q.W.I. staff says a most sincere "thank you" for the many friendly messages received during the holiday season. They bring a warmth to the office and lighten the task of the day. No wonder we feel that W.I. members are grand people to work with.

The Month With The W.I.

Journal copy had to be in before the holiday. That meant a rush all along the line. Counties that could not get their news away in time to be included may be assured later reports will find their place in the Journal next month. Many Christmas meetings are here, though. Exchange of gifts, carol singing, cheer for those less fortunate, always an integral part of all reports, never lose their appeal.

The National Foundation Fund (N.F.F.) would appear to be going over well. This free will offering to our own organization, on a nation wide scale, is being set aside to establish a central office in Ottawa, a milestone to mark the 60th anniversary of the W.I. in 1957.

The Women's Voluntary Services has been held up with late orders for uniforms, could not get them cut out fast enough. Branches reporting they have finished their lots are: South Bolton, Franklin Centre, Canterbury, Inverness, Quyon, Valcartier, Ascot, Beebe, Hatley Centre. To date, 50 Institutes have asked for uniforms, in varying numbers, a wonderful response which is much appreciated by the W.V.S.

Brome: Abercorn had a quiz contest on Citizenship. A sale of remnants, aprons and costume jewellery was held and a hot dish supper. Austin sent 14 Christmas parcels to the Wales Home and gave donations for cheer and to the Service Fund. The \$50 Bursary was won by Pamela and Janice Taylor. South Bolton sanded the floor of the club room. A youth group was organized and will use this room. The Christmas party was planned.

Chat-Huntingdon: Aubrey-Riverfield held a busy all-day meeting. Four quilts were quilted and a pot-luck dinner served. Gifts of toys and quilts are to be sent for Hungarian Relief. Dundee heard talks on "Milk Treated for Storage" and "Federal Aid to Universities". Demonstrations were Bed Socks and Child's Quilt and two quizzes were held on the Handbook and Radio and TV programs and artists. Members donated 10½ lbs. of used cotton to the Cancer Society. Franklin Centre heard talks on "Christmas Customs in Other Lands" and had a demonstration on Christmas Centrepieces. Husbands of members were entertained at a supper and card party. Hemmingford renewed their membership in the CAC. The sale of UNICEF cards amounted to \$17. A contest was held on home-made gifts and members displayed slippers made at the recent course. Howick heard a reading on "How the Queen will spend Christmas". A demonstration was held on fancy cookies, which were later taken to the Snowdon Home in Ormstown. Donations were \$25 to UNICEF, cottons to the Cancer Society and canned applesauce and plums to the school cafeteria. Huntingdon was demonstrations of Christmas decorations and centrepieces. Fancy and practical aprons was the contest here and a donation was given the Tiny Tim Fund.

Compton: Bury heard a talk by the Rev. Mr. Norris on "Christian Education", and other topics, covered by the convenors were; Christmas Customs in other Lands, Legends of Christmas, Toys, etc. Uncooked Christmas cake and homemade candy were on display and a member had pictures and magazines from a pen-pal in Holland. Canterbury heard a talk by Mrs. F. G. Bennett on the Suez. Card parties have been held and a contribution given to the N.F.F. A box to the Military Hospital and another to the Cecil Memorial Home (clothing) are also reported. Cookshire had a quiz on Canada and a report of the Junior Red Cross. Talks were given on the "Pre-



These are some of the members of the Franklin Centre W.I. who visited the Valleyfield Cotton Mills. Many more made the trip but the others, says the report, "were too busy in the remnant store of the mill to be bothered with a picture!" The lone man in the group was their guide on the tour.



Fordyce followed the custom of Flower Pot W.I. in Tasmania when they had the "exchange programme" meeting and presented corsages to two members who celebrated birthdays. They are Mrs. R. Dustin, left, and Mrs. A. Dryden.

servation of Eggs" and "Thread". The money-raiser was a round-robin. East Angus had a busy week at a glove course taught by Miss Altimas, which closed with a tea and social hour, and a gift for the instructor. A tour was made of the Wallace Plant in Cookshire. Paper drive, card party and sale of dolls aided the funds and donations included the Cecil Memorial Home, School prizes, and N.F.F. East Clifton gave donations to the United Church, the N.F.F. and Q.W.I. Service Fund. Each member paid 45¢ share in the County Educational Bursary. Sawyerville's Citizenship convenor interviewed a new Canadian, Mrs. P. Jesperson on her first impressions of Canada and her life in Denmark. This branch catered at a card party for the benefit of the local library and helped to celebrate the 91st birthday of Mrs. Cora Austin, who was present at the party. Sawyerville and East Clifton combined their efforts in purchasing a picture of the Queen for the school. Scotstown gathered used stamps and comic books for the Junior Red Cross, held a paper drive and contributed to the N.F.F. Over \$44 was collected by the Students' Council for UNICEF on Hallowe'en and \$5 worth of UNICEF cards had been purchased.

Gaspé: Wakeham had a sale of handicrafts and home cooking, part of the proceeds to go to the N.F.F. Colored slides, "Across Canada, from Victoria to Gaspé", were enjoyed, and a prize given for the most attractively wrapped parcel. A shipment of books has arrived from the McLennan Travelling Library.

Megantic: Inverness catered for a turkey supper and helped to purchase two utility carts for the hall. Toys were collected for poor children and help given the community Christmas tree. Lemesurier gave donations to the

county fund, the school, (for prizes) the Service Fund, and sent 20 lbs. of used cotton to the Cancer Society.

Papineau: Made plans for the Christmas bazaar. The convenor of Citizenship reported on the Poppy Sale.

Missisquoi county voted a donation to the N.F.F. at their semi-annual meeting. Cowansville collected money for the Social Services of the Hospital. Dunham had a contest of jumbled words, relating to Christmas, and plans were made for the season's cheer. Members from a neighbouring W.I. are invited to the next meeting. Fordyce celebrated their 10th anniversary with a turkey dinner at a local restaurant. Mrs. G. Brown, Provincial Convenor of Agriculture, was the special guest at the Christmas Party. Gifts are being sent to the local hospital and money to the Children's Memorial Hospital. Stanbridge East had a hat remodelling course with Miss McOuat, closing with a display of hats, a tea, and a gift to the teacher. UNICEF cards have been sold and local youth collected \$22.50 on Hallowe'en for the same cause.

Pontiac: Bristol had a showing of films. Clarendon gave donations to the T.B. Fund and the N.F.F. A talk was given by Mr. Rowatt, N.P. on "Women's Rights in Quebec". Quyon heard humorous readings on "What Makes a Boy", and "What Makes a Girl". Donations here were to the T.B. Fund, Can. Institute for the Blind, the N.F.F. and Service Fund. Shawville studied some sections of the Handbook and had a contest on making up advertising copy. Another donation to the N.F.F. is reported here. Wyman has started work on a skating rink. A donation was given to the Can. Institute for the Blind and the proceeds of a sale of useful articles went to the N.F.F.

Quebec: Valcartier gave donations of equal value to the Protestant and Catholic Schools (to be used for something beneficial for the pupils) and another to the N.F.F. Euchre parties were the "money-raisers". Candy was sent to the schools for Christmas.

Richmond: Dennison's Mills welcomed two new members. A Christmas Tree was held for the children and a contribution given the N.F.F. Gore had a discussion and quiz on the Handbook. A contest was held on homemade





The Director of Public Relations for the F.W.I.C. establishing excellent ones with Ridgedale W.I. in British Columbia. She came as guest speaker and ended up in a fashion show. You'll find her in the checked suit and gorgeous bonnet, having a wonderful time.

Christmas cards. A box of clothing was sent to the Salvation Army and gifts to the Veteran's Hospital. Melbourne Ridge catered at a Legion Banquet. Each member donated an article for the Cecil Memorial Home, the Kingsbury ladies giving a blanket for the same cause. A sales table and sale of birthday parcels were profitable ventures. Richmond Hill reports repairs are underway on the W.I. Hall and a fire extinguisher was purchased. A parcel of children's clothing was sent to the Cecil Memorial Home. Spooner Pond is another branch contributing most liberally to the N.F.F. Several gifts and some money was brought in for the Cecil Memorial Home. Shipton had a quiz on "Facts About Canada". A Christmas box was sent to a lady in England and a Christmas Tree held for the members' children. A donation of money was sent to the Cecil Memorial Home.

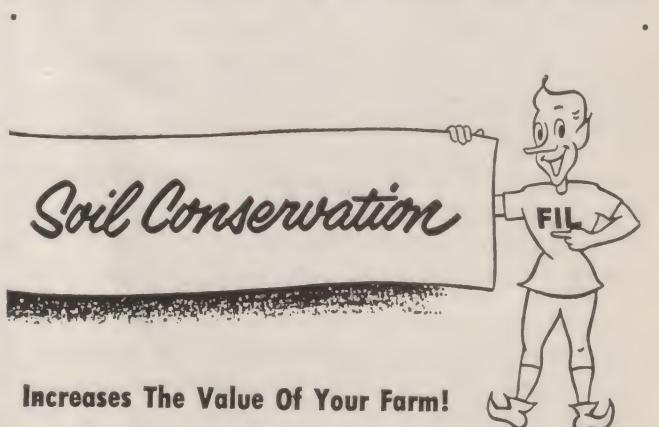
Rouville: Abbotsford had a talk by the Rev. Major C. W. Foggo, chaplain in the last war, who spoke on that conflict and also touched upon present world conditions. Three scholarships of \$25 each were presented to local school students. Christmas gifts were given to be sent to the Montreal Children's Hospital and suggestions submitted on Christmas decorations. A humorous Christmas reading, "Turkey Trot", was enjoyed.

Sherbrooke County held a cooking school in November. Ascot voted to pay a share of the care for an European child and gave donations to the Service Fund, and the N.F.F. Belvidere brought gifts to the Lawrence School Library, and the Lennoxville High School toward prizes. Lennoxville heard an address, "You and Your Family under Quebec Law" (pertaining to the making of wills) and gave money for school fair prizes. An auction was held to raise funds for the N.F.F.

Stanstead County's Home Economics convenor, Mrs. N. R. Brevoort, gave the broadcast over Station WIKE,

Newport, telling of the work of her department. At Beebe publicity for the W.I. was given when Mrs. A. Little spoke at a recent meeting of the Rotary Club. Money was sent to the Montreal Children's Hospital, the Service Fund and the N.F.F. A Christmas quiz was part of the program at the meeting. Hatley Centre held a discussion on an article published in the Reader's Digest, pertaining to war veterans in hospitals across Canada. Several members chose a veteran's name and will endeavour to write, send gifts, or visit him. A boy attending McKay Institute in Montreal is being helped. Minton gave a donation toward school prizes and another for hot lunches at the North Hatley High School. Stanstead North held a contest on the most originally wrapped gift for exchange. Donations included money for the Sunnyside School hot lunch program and one book given for each of nine grades in the same school. Way's Mills highlighted Christmas decorations at their meeting. Donations reported are for the upkeep of the Community Hall, toys to the Children's Hospital and a box of sheets and diapers to the Cecil Memorial Home.

Vaudreuil: Cavagnal's meeting combined the two topics of welfare and Health and Publicity. The guest speaker was Mrs. R. G. Gilbride, a member of the Provincial Board of the Association for the Help of Retarded Children. About 40 interested members and friends were present at this open meeting.



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THE COLLEGE PAGE

The Macdonald Clan

Notes and News of Staff Members and Former Students

Mac Scientists At AAAS Meeting

TWO members of the staff — Prof. Crampton in Nutrition and Prof. Morrison in Entomology — took part in the 123rd meeting of the American Association for the Advancement of Science, held in New York from December 26th to 30th.

The "Triple A - S" as the Association is known among scientists, was organized in September, 1848, in Philadelphia, and now has 52,000 individual members. It has 264 learned societies associated or affiliated with it, including 41 academies of science, and the aggregate memberships of these societies, which represent scientists all over the world, exceed 2,000,000. The AAAS is thus by far the largest and most influential group of related scientific organizations in the world, and its annual meetings attract worldwide attention.

Its purpose is fourfold: to further the work of scientists, to facilitate cooperation among scientists, to make science more effective in promoting human welfare, and to increase public understanding of science.

At the New York meeting 2,000 individuals presented papers reporting recent developments in all branches of science from astronomy to zoology. Fifteen of these came from Canada. Ontario was represented by 9; the Macdonald College pair and Dr. Paul Martin of the University of Montreal represented Quebec, and Alberta, Manitoba and Saskatchewan had one representative each. Other countries beside than the United States with representation were Colombia, Cuba, England, Germany, Israel, Jamaica, Sweden, Trinidad and Wales.

Prof. Crampton's paper presented an entirely new concept of the feeding problem, based on experimental work done here and elsewhere on the use of roughages by ruminants. His report, when boiled down into language which can be understood by the non-scientist, showed that a sheep, for instance, does not eat a particular feed because she likes its taste. She is impelled to eat when she

gets hungry, and the time that elapses between each hungry period depends on the rate at which she has digested her previous meal. This is the important thing, for this determines how much total roughage she will eat in a day, and how much production she can support in consequence. Late-cut forage, which is coarse, woody and lignified, doesn't digest as quickly as forage cut at the ideal time of its growth. Consequently, a sheep fed on this kind of feed doesn't get hungry as often as she would if she were eating better feed, and so she eats less in a day or a week than she would if her feed were being digested faster. We will be having more to say about this in an early issue.

Prof. Morrison dealt with a topic which is of general interest, namely, insects and their resistance to insecticides. We know by sad experience that the early promise of DDT has not been fulfilled; DDT is losing its effectiveness against houseflies, for instance, because the flies have developed strains which are resistant to its action. Let us take the example of a large restaurant which calls in an expert to control flies in the dining room. If the expert had some way of finding out, before he started his spraying, if the flies in this particular restaurant were of the resistant or the non-resistant type, he would know at once whether the job could be done with DDT or whether he would have to find something else. Prof. Morrison's report indicated that it may be possible, by examining a sample of the flies in a given population under the microscope, to determine just this. There seem to be some physical differences between the two types which can be recognized by careful examination; and it is possible that other kinds of insects may have developed similar differences.

He also took part in a discussion on the training of entomologists, and, with Dr. A. S. West of Queen's University, outlined the courses available to entomological students in Canadian universities.



The Kiwanis Club of Montreal offers generous bursaries to selected students of the Diploma Course, and many students have received this assistance in the course of the last few years. Some of these were entertained at a dinner party in Montreal a few weeks ago, and we reproduce above a picture that was taken then. In the front row are George Irving and his sister Patricia of St. Anicet and Ross Elliott of Howick. Standing are Gerald Duncan, Ormstown, Bill Ness, Ormstown, Art Rankin, Huntingdon, Norris Sample, Hemmingford, Hugh Hammond, Don McOuat, St. Andrews East, John Oswald, St. Scholastique, and Stuart Duncan, Ormstown.

How Can You Decide Which Feeds to Buy?

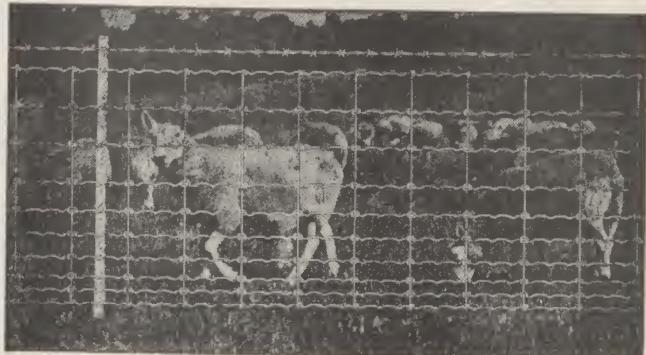
The best way is to list the prices of feeds available which meet your needs and calculate the cost of a pound of T.D.N. (Total Digestible Nutrients) from each feed source. For example, corn and barley might be available at the same price of \$3.00 per cwt.. The Quebec Feed Board formula bulletin gives the average T.D.N. values for these two grains as: Barley, 71%; Corn, 80%.

If we use barley, 71 lbs. of T.D.N. will cost \$3.00. One pound of T.D.N. from barley will cost 4.12 cents — similarly, one pound of T.D.N. from corn will cost 3.75 cents. From these figures it is evident that corn would be a better buy than barley.

In the case of protein supplements, the cost of a pound of digestible protein from each source should be the criterion. Early this winter Soya Bean Oil meal was generally a cheaper source of protein than the more commonly used linseed oil meal.

The Quebec Feed Board's "Feeders' Guide and Formulae for Meal Mixtures" gives a guide to the variety of feeds which might be used in a dairy cow meal mixture. The average digestible protein and T.D.N. values are indicated for each feed in a table at the back of this pamphlet. A copy of this publication is available to Quebec farmers free by writing to the Department of Agriculture, Que. or Macdonald College, Que.

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